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## **AMENDMENTS TO THE CLAIMS**

## **Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-37. (Canceled)

38. (Currently amended) A method for treating an interleukin-12 overproduction-related disorder, wherein the disorder is rheumatoid arthritis, sepsis, Crohn's disease, multiple sclerosis, psoriasis, or insulin-dependent diabetes mellitus, comprising administering to a subject in need thereof an effective amount of the compound of formula (I):

$$R_3$$
 $R_4$ 
 $R_4$ 
 $R_5$ 
 $R_5$ 
 $R_5$ 
 $R_5$ 
 $R_7$ 

-wherein-

$$= \begin{array}{c} R^a \\ R_1 \text{ is }, \text{ aryl, or heteroaryl;} \end{array}$$

wherein

$$R_1$$
 is  $N = R^a$ , aryl, or heteroaryl;

each of  $R_2$  and  $R_4$ , independently, is  $R^c$ , halogen, nitro, cyano, isothionitro,  $SR^c$ , or  $OR^c$ ; or  $R_2$  and  $R_4$ , taken together, is carbonyl;

 $R_3$  is  $R^c$ , alkenyl, alkynyl,  $OR^c$ ,  $OC(O)R^c$ ,  $SO_2R^c$ ,  $S(O)R^c$ ,  $S(O_2)NR^cR^d$ ,  $SR^c$ ,  $NR^cR^d$ ,  $NR^cCOR^d$ ,  $NR^cC(O)OR^d$ ,  $NR^cC(O)NR^cR^d$ ,  $NR^cSO_2R^d$ ,  $COR^c$ ,  $C(O)OR^c$ , or  $C(O)NR^cR^d$ ;  $R_5$  is H or alkyl;

n is 0, 1, 2, 3, 4, 5, or 6;

X is O, S, S(O), S(O<sub>2</sub>), or  $NR^c$ ;

Y is a covalent bond, CH<sub>2</sub>, C(O), C=N-R<sup>c</sup>, C=N-OR<sup>c</sup>, C=N-SR<sup>c</sup>, O, S, S(O),  $S(O_2)$ , or  $NR^c$ ;

Z is N or CH;

one of U and V is N, and the other is  $CR^C$ ; and W is O, S, S(O), S(O<sub>2</sub>), NR<sup>c</sup>, or NC(O)R<sup>c</sup>

in which each of R<sup>a</sup> and R<sup>b</sup>, independently, is H, alkyl, aryl, heteroaryl; and each of R<sup>c</sup> and R<sup>d</sup>, independently, is H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, or alkylcarbonyl; or pharmaceutically acceptable salt thereof.

39. (Cancelled)

40. (Currently amended) A pharmaceutical composition comprising an effective amount of the compound of formula (I):

$$R_3$$
  $C_{\stackrel{}{\downarrow}}^{\stackrel{}{\downarrow}}_{\stackrel{}{\uparrow}}^{\stackrel{}{\downarrow}}_{\stackrel{}{\downarrow}}^{\stackrel{}{\downarrow}}_{\stackrel$ 

wherein

$$R_1$$
 is  $N = \begin{pmatrix} R^a \\ R^b \end{pmatrix}$ , aryl, or heteroaryl;

each of  $R_2$  and  $R_4$ , independently, is  $R^c$ , halogen, nitro, cyano, isothionitro,  $SR^c$ , or  $OR^c$ ; or  $R_2$  and  $R_4$ , taken together, is carbonyl;

R<sub>3</sub> is R<sup>c</sup>, alkenyl, alkynyl, OR<sup>c</sup>, OC(O)R<sup>c</sup>, SO<sub>2</sub>R<sup>c</sup>, S(O)R<sup>c</sup>, S(O<sub>2</sub>)NR<sup>c</sup>R<sup>d</sup>, SR<sup>c</sup>, NR<sup>c</sup>R<sup>d</sup>, NR<sup>c</sup>COR<sup>d</sup>, NR<sup>c</sup>C(O)OR<sup>d</sup>, NR<sup>c</sup>C(O)NR<sup>c</sup>R<sup>d</sup>, NR<sup>c</sup>SO<sub>2</sub>R<sup>d</sup>, COR<sup>c</sup>, C(O)OR<sup>c</sup>, or C(O)NR<sup>c</sup>R<sup>d</sup>;

R<sub>5</sub> is H or alkyl;

n is 0, 1, 2, 3, 4, 5, or 6;

X is O, S, S(O), S(O<sub>2</sub>), or  $NR^c$ ;

Y is a covalent bond,  $CH_2$ , C(O),  $C=N-R^c$ ,  $C=N=OR^c$ ,  $C=N-SR^c$ , O, S, S(O),  $S(O_2)$ , or  $NR^c$ ;

Z is N or CH;

one of U and V is N, and the other is CRc; and

W is O, S, S(O), S(O<sub>2</sub>),  $NR^c$ , or  $NC(O)R^c$ ;

in which each of R<sup>a</sup> and R<sup>b</sup>, independently, is H, alkyl, aryl, heteroaryl; and each of R<sup>c</sup> and R<sup>d</sup>, independently, is H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, or

alkylcarbonyl; or pharmaceutically acceptable salt thereof; and a pharmaceutically acceptable carrier.

41. (Previously presented) The pharmaceutical composition of claim 40, wherein R<sub>1</sub> is

- 42. (Previously presented) The pharmaceutical composition of claim 41, wherein U is N and V is CH.
- 43. (Previously presented) The pharmaceutical composition of claim 41, wherein Z is N and W is O.
- 44. (Previously presented) The pharmaceutical composition of claim 41, wherein X is  $NR^c$ .
- 45. (Previously presented) The pharmaceutical composition of claim 44, wherein R<sup>c</sup> is H, methyl, ethyl, or acetyl.
- 46. (Previously presented) The pharmaceutical composition of claim 41, wherein Y is O or CH<sub>2</sub>, and n is 0, 1, 2, 3, or 4.
- 47. (Previously presented) The pharmaceutical composition of claim 46, wherein  $R_3$  is aryl or heteroaryl.
- 48. (Previously presented) The pharmaceutical composition of claim 47, wherein R<sub>3</sub> is pyridinyl.

- 49. (Previously presented) The pharmaceutical composition of claim 46, wherein R<sub>3</sub> is OR<sup>c</sup>, SR<sup>c</sup>, C(O)OR<sup>c</sup>, or C(O)NR<sup>c</sup>R<sup>d</sup>.
- 50. (Previously presented) The pharmaceutical composition of claim 46, wherein  $R_3$  is

in which

each of A and A', independently, is O, S, or NH; each of  $R^e$  and  $R^f$ , independently is H, alkyl, aryl, or heteroaryl; and m is 1 or 2.

51. (Previously presented) The pharmaceutical composition of claim 41, wherein one of  $R^a$  and  $R^b$  is

$$R^{h_{p}}$$
,  $R^{h_{q}}$ , or  $R^{h_{q}}$ 

in which

B is NR<sup>i</sup>, O, or S;

B' is N or CRi;

R<sup>g</sup> is H, alkyl, or alkoxyl;

 $R^h$  is halogen, NO<sub>2</sub>, CN, alkyl, aryl, heteroaryl, OR<sup>c</sup>, OC(O)R<sup>c</sup>, SO<sub>2</sub>R<sup>c</sup>, S(O)R<sup>c</sup> S(O<sub>2</sub>)NR<sup>c</sup>R<sup>d</sup>, SR<sup>c</sup>, NR<sup>c</sup>R<sup>d</sup>, NR<sup>c</sup>COR<sup>d</sup>, NR<sup>c</sup>C(O)OR<sup>d</sup>, NR<sup>c</sup>C(O)NR<sup>c</sup>R<sup>d</sup>, NR<sup>c</sup>SO<sub>2</sub>R<sup>d</sup>, COR<sup>c</sup>, C(O)OR<sup>c</sup>, or C(O)NR<sup>c</sup>R<sup>d</sup>;

Ri is H, alkyl, or alkylcarbonyl;

p is 0, 1, or 2; and

q is 0, 1,2, 3,or 4.

52. (Currently amended) The pharmaceutical composition of claim 51, wherein one of R<sup>a</sup> and R<sup>b</sup> is

$$\mathbb{R}^{q}$$
 or  $\mathbb{R}^{h_{q}}$  i ; and

He is reliable in delivering work product to the client on time the other of  $R^a$  and  $R^b$  is H or alkyl.

- 53. (Previously presented) The pharmaceutical composition of claim 52, wherein  $R^g$  is H, methyl, ethyl, propyl, cyclopropyl, methoxy, or ethoxy;  $R^h$  is F, Cl, CN, methyl, methoxy, ethoxy, OC(O)CH<sub>3</sub>, OC(O)C<sub>2</sub>H<sub>5</sub>, C(O)OH, C(O)OC<sub>2</sub>H<sub>5</sub>, C(O)NH<sub>2</sub>, NHC(O)CH<sub>3</sub>, or S(O<sub>2</sub>)NH<sub>2</sub>;  $R^i$  is H, methyl, ethyl, or acetyl, and q is 0, 1, or 2.
- 54. (Previously presented) The pharmaceutical composition of claim 53, wherein R<sup>g</sup> is methyl or methoxy; R<sup>i</sup> is H; and q is 0.
- 55. (Previously presented) The pharmaceutical composition of claim 53, wherein U is N and V is CH.
- 56 (Previously presented) The pharmaceutical composition of claim 55, wherein Z is N and W is O.
- 57. (Previously presented) The pharmaceutical composition of claim 56, wherein X is NR<sup>c</sup>; and R<sup>c</sup> is H, methyl, ethyl, or acetyl.
- 58. (Previously presented) The pharmaceutical composition of claim 57, wherein Y is O or CH<sub>2</sub>; and n is 0, 1, 2, 3, or 4.
- 59. (Previously presented) The pharmaceutical composition of claim 58, wherein  $R_3$  is aryl or heteroaryl.

- 60. (Previously presented) The pharmaceutical composition of claim 59, wherein R<sub>3</sub> is pyridinyl.
- 61. (Previously presented) The pharmaceutical composition of claim 53, wherein Y is O or CH<sub>2</sub>, and n is 0, 1, 2, 3, or 4.
- 62. (Previously presented) The pharmaceutical composition of claim 61, wherein  $R_3$  is aryl or heteroaryl.
- 63. (Previously presented) The pharmaceutical composition of claim 61, wherein R<sub>3</sub> is pyridinyl.
- 64. (Previously presented) The pharmaceutical composition of claim 40, wherein R<sub>1</sub> is aryl or heteroaryl.
  - 65. (Previously presented) The pharmaceutical composition of claim 64, wherein R<sub>1</sub> is

in which

D is O, S, or  $NR^m$ ;

R<sup>j</sup> is benzo, halogen, CN, hydroxyl, alkyl, aryl, heteroaryl, alkoxyl, aryloxyl, or heteroaryloxyl;

R<sup>m</sup> is H, alkyl, or alkylcarbonyl; and r is 0, 1, or 2.

- 66. (Previously presented) The pharmaceutical composition of claim 65, wherein X is  $NR^c$ ; and  $R^c$  is H, methyl, ethyl, or acetyl.
- 67. (Previously presented) The pharmaceutical composition of claim 66, wherein U is N and V is CH.

- 68. (Previously presented) The pharmaceutical composition of claim 67, wherein Z is N and W is O.
- 69. (Previously presented) The pharmaceutical composition of claim 68, wherein Y is O or CH<sub>2</sub>; and n is 0, 1, 2, 3, or 4.
- 70. (Previously presented) The pharmaceutical composition of claim 65, wherein Y is O or CH<sub>2</sub>; and n is 0, 1, 2, 3, or 4.
- 71. (Previously presented) The pharmaceutical composition of claim 70, wherein  $R_3$  is aryl or heteroaryl.
- 72. (Previously presented) The pharmaceutical composition of claim 71, wherein R<sub>3</sub> is pyridinyl.
- 73. (Previously presented) The pharmaceutical composition of claim 70, wherein R<sub>3</sub> is OR<sup>c</sup>, SR<sup>c</sup>, C(O)OR<sup>c</sup> or C(O)NR<sup>c</sup>R<sup>d</sup>.
- 74. (Previously presented) The pharmaceutical composition of claim 70, wherein  $R_3$  is

in which

each of A and A', independently, is O, S, or NH; each of R<sup>e</sup> and R<sup>f</sup>, independently is H, alkyl, aryl, or heteroaryl; and m is 1 or 2.

75. (Previously presented) The pharmaceutical composition of claim 70, wherein  $R_1$  is

76. (Previously presented) The pharmaceutical composition of claim 75, wherein R<sup>j</sup> is methyl, ethyl, propyl, or benzo; and r is 1 or 2.

77. (New) The method of claim 38, wherein the disorder is rheumatoid arthritis.

78. (New) The method of claim 38, wherein the disorder is Crohn's disease.

79. (New) The method of claim 38, wherein the disorder is multiple sclerosis.

80. (New) The method of claim 38, wherein the disorder is psoriasis.

81. (New) The method of claim 38, wherein the disorder is diabetes mellitus.

82. (New) The method of claim 38, wherein the disorder is sepsis.

83. (New) The method of claim 38, wherein the compound of formula (I) is:

84. (New) The pharmaceutical composition of claim 40, wherein the compound of formula (I) is: